DataCollect

CMDT 3900 for iOS, Version 3.0.0



User Manual P/N 15V-090-00053-100 Revision A

▲ WARNING! Read this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury, damage to the product, or incorrect readings. Keep this manual in a safe location for future reference.



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Product Support - Contact Information

Product Support – To request a <u>Return Authorisation</u>, <u>Product Calibration</u> or a <u>Product Support Plan</u>, use the web page links for direct contact and support.

Product Sales - For information on purchasing condition monitoring products, services or customer support, contact your local SKF sales office.

General Product Information

For general product information (i.e., product data sheet, accessories catalogue, etc.), visit the <u>Condition Monitoring Products</u> page on SKF.com and select the appropriate product link.

Technical Support Group

Discuss/review issues of specific interest with maintenance and reliability specialists from around the world at the SKF Knowledge Centre.

For technical support on issues like troubleshooting product installation, troubleshooting product performance, etc., use our <u>technical support</u> web page to contact one of our Technical Support Groups.

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DataCollect Overview

DataCollect combines the intuitiveness of an iPad® app with the power to customise a wide range of input types used for the documentation of audits, quality assurance, safety inspections, machine operator inspections, work orders and more.

A web interface allows companies to set up users with different access levels, and these users can then be combined into groups. Business process steps walk users through various forms and questions. Data collection progress is easy to view in both the web interface and on iOS devices. It is simple for users to add photos, notes, and audio recordings to their observations – and all of the data can be quickly uploaded and securely stored in the safety of the SKF cloud. DataCollect is a powerful tool not only for *process* and *inspection* data collection, but also for recording *vibration measurement* data. When used in conjunction with the SKF QuickCollect sensor, it is quick and easy for an operator to take machine vibration readings using the app.

DataCollect provides instant reporting features, which enable fast feedback to decision makers in your organization.

You can even work with your SKF @ptitude Analyst ROUTEs in DataCollect and export collected data directly to SKF Cloud-hosted instances of @ptitude Analyst! Please contact <u>DataCollect Support</u> to learn more.

How DataCollect Works

With DataCollect, an administrator first builds each necessary form using Form Builder or an Excel® based template (a baseline template with examples is provided). Next, that administrator saves the form (from Form Builder) or uploads the completed form templates to the DataCollect web interface, where they publishe the forms and adds them to a process.

The users in one or more user groups have access to the process and can collect data to the process forms via their iPads as appropriate. If an administrator updates a process, its steps, or its forms, the software will make the updates available for download by the users immediately. Similarly, the data collected by each user will flow back to the web interface for analysis and reporting. Meanwhile, the users are ready to generate reports directly from their iPads.

- 1. The administrator creates a form in Form Builder or uploads a completed Excel template to the DataCollect web interface.
- 2. In the web interface, the administrator associates the form with one or more processes and groups that have been established.
- 3. Within minutes, operators in the applicable group(s) can load the processes and begin collecting data via their devices.
- 4. The app sends the data back to the web interface, where it can be compiled and analysed.
- 5. Ultimately, operators generate reports from within the DataCollect app on their device and administrators work with collected data via the web interface.

DataCollect Structure

Process – a series of steps a user must follow to complete a data collection task in the DataCollect app; an administrator creates each process and defines its steps via the DataCollect web interface.

Work Order – a single instance of a specific process; an administrator can create multiple work orders based on a single process

Step – a subdivision of a process; each step is comprised of a set of forms (or collections)

Form – a set of DataCollect questions created in Form Builder or an Excel spreadsheet that has been constructed to define a set of DataCollect questions and uploaded to the web interface

Collection – a single instance of a specific form; each collection is comprised of a set of questions

Question Category – a grouped set questions within a form (or collection)

Question – the individual element for which a specific data collection entry or selection must be completed

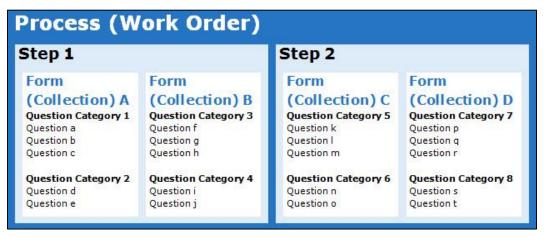


Figure 1 - 1.
DataCollect Structure.

About This Manual

This manual provides information on the DataCollect CMDT 3900 for iOS and the SKF QuickCollect Sensor CMDT 390 to collect velocity, enveloped acceleration and temperature measurements.

As you use this manual, you will discover certain conventions used:

Bold type indicates text that appears on a menu, window, or dialog.

Italics emphasize important information.

> indicates a note to the reader.

Step-by-step procedures are sequenced with bullet points, •.

<u>Underlined hyperlinks</u> take you to referenced locations within this document or external websites. Some hyperlinks bring up an email window for the purpose of contacting SKF.

User Manual Outline

In this user manual, we will describe how to get started with DataCollect.

Chapter 2, Getting Started provides instructions on how to download, install, and launch the DataCollect app, how to create an account, and how to log into both the app and the web interface.

Chapter 3, Configuring Settings describes how to manage DataCollect settings and find important app information.

Chapter 4, Completing Work Orders describes how to process work order questions while in the field, provides detail on question types and discusses data collection results.

Chapter 5, Completing Standalone Collections describes how to process standalone collection questions—specifically vibration measurements—while in the field. This chapter also provides details on how to complete EAN/QR code scan data collection question types, vibration measurement question types and all other (process and inspection) question types.

Appendix A, SKF @ptitude Analyst ROUTEs and DataCollect describes how to collect SKF @ptitude Analyst ROUTE data via the DataCollect app and send that data back to @ptitude Analyst for analysis and reporting.

Appendix B, About DataCollect App Version Upgrades provides helpful information on periodic upgrades to the DataCollect app.

Appendix C contains the SKF software end-user license agreement.

Supported Devices and Browsers

SKF supports DataCollect on iPad Air and iPad Mini devices.

IMPORTANT: Before you purchase a device for use with DataCollect, speak with your SKF representative or contact apps@skf.com to confirm it is a supported device type and has the correct Bluetooth® chip.

The web interface is optimised to run in a Google Chrome[™] browser. All instructions provided are for a Google Chrome browser; experiences in other browsers may vary.

Technical Support

DataCollect Support

If you have any questions or support issues regarding DataCollect, please email apps@skf.com.

For application download support, please email skf.it.service.desk@skf.com.

Getting Started

Chapter Overview

Before you can work in DataCollect, you must create an account starting from the DataCollect app or respond to an invitation email from DataCollect. You may then <u>log into</u> the DataCollect app and log into the DataCollect web interface.

Download, Install, and Launch the DataCollect App

If instructed by SKF IT Service, download and install the DataCollect app according to their instructions. Otherwise, you may download and install the app via the Apple App Store. After the download and installation, the DataCollect app will be available on your iPad.

To launch DataCollect:

Tap the DataCollect icon on your iPad. The Login screen will appear.

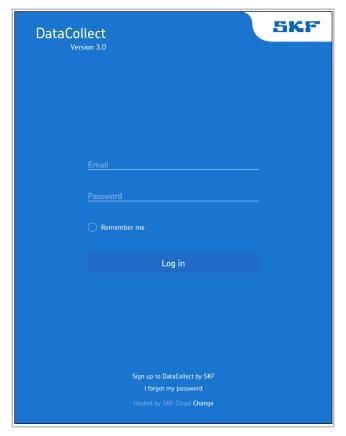


Figure 2 - 1. Login Screen.

If you already have an account (after e.g. receiving and acting upon a DataCollect invitation email), you may now <u>log into the DataCollect app</u>. If you do not have an account, you may now create one as described in the following section.

Create an Account Starting from the DataCollect App

To create an account starting from the DataCollect app:

• On the Login screen, tap the **Sign up to DataCollect by SKF** hyperlink. The new user account creation options will appear.

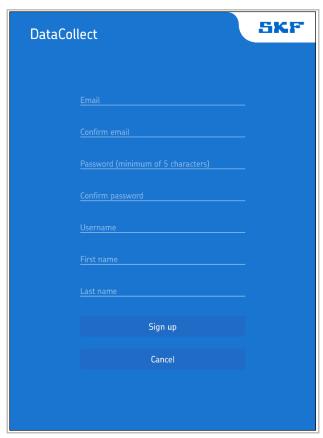


Figure 2 - 2.
New User Account Creation Options.

• Enter and confirm your **Email**, create and confirm a **Password** (minimum of 5 characters), create a **Username**, and enter your **First name** and **Last name**.

• Tap **Sign Up**. While DataCollect sends an **Email Verification** email to the account that you have provided, an account creation verification screen will appear.

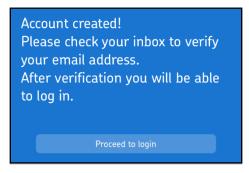


Figure 2 - 3. Account Creation Verification.

- Once you have verified your email, you can return to this screen, click Proceed to login and then log into the DataCollect app.
- Access your email, open the message DataCollect has sent, and click the Verify e-mail
 now link. The DataCollect web interface launches and displays an E-mail is verified!
 page.

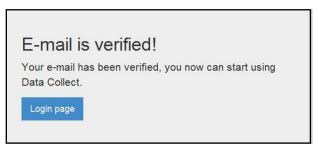


Figure 2 - 4. E-mail is Verified! Page.

• Click **Login page**. The web interface **Login** page appears.

You may now <u>log into the DataCollect app</u>. You may also <u>log into the DataCollect web</u> interface.

Create an Account by Responding to an Invitation Email

In some instances, you may receive a DataCollect **Invitation** email, from which you can start the account creation process.

- To create an account by responding to an invitation email:
- Access your email account, open the message DataCollect has sent, and click the Accept Invitation link. The DataCollect web interface will launch and display a Create user account page.

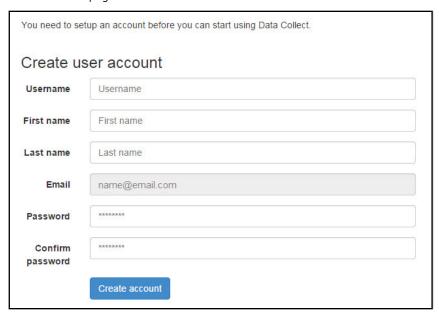


Figure 2 - 5. Create User Account Page.

- Create a **Username**, enter your **First name** and **Last name**, and create and confirm a **Password** (minimum of 5 characters).
 - Note that all fields must be completed to create a user account.
- Click **Create account**. An updated account verification page will appear, after which the screen will refresh and the web interface **Login** page will appear.

You may now <u>log into the DataCollect app</u>. You may also <u>log into the DataCollect web</u> interface.

Log into the DataCollect App

➤ If the account creation verification page is still displayed, tap Proceed to login to access the Login screen.

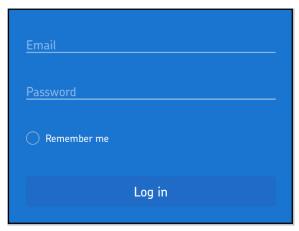


Figure 2 - 6. Login Area on the Login Screen.

To log into your account:

- On the **Login** screen, enter your account **Email** and **Password**.
- If you would like DataCollect to save your credentials for future logins, select (tap) Remember me.
- Tap Log in. The DataCollect app will load.
 - You must access the app and the web interface with the same user credentials.

To reset your password:

• At the bottom of the **Login** screen, tap the **I forgot my password** hyperlink. The password recovery screen will appear.

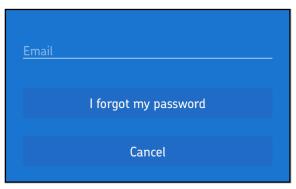


Figure 2 - 7.
Password Recovery Screen.

• Enter your account **Email** and tap **I forgot my password**. The app will send you an email with a password reset link. Follow the instructions provided.

Change Host Environment

The SKF Cloud is the default host environment for DataCollect. Depending on your company's implementation of the product, you may need to select a different host environment. If you have any questions regarding the setup of alternative host environments, contact your System Administrator or email mailto:apps@skf.com.

To change the host environment:

- On the Login screen, tap the Change hyperlink. The change environment screen will appear.
- Enter the IP or DNS of the alternative environment and tap **Change to this** environment.



Figure 2 - 8. Change Environment Screen.

Log into the DataCollect Web Interface

The DataCollect web interface is available at datacollect.skf.com.

IMPORTANT: The web based system is optimized to run in a Google Chrome browser. All instructions provided are for a Google Chrome browser; experiences in other browsers may vary.

To log into your account:

Go to DataCollect at <u>datacollect.skf.com</u>. The **Login** page will be displayed.

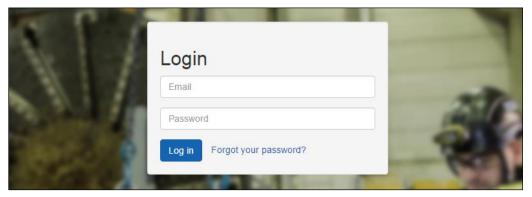


Figure 2 - 9. The **Login** Page.

- On the Login page, enter your account Email and Password.
- Click Log in. The DataCollect web interface will load.
 - > You must access the web interface and the app with the same user credentials.

IMPORTANT: DataCollect uses cookies. By using DataCollect, you agree to SKF's use of cookies per the policy accessible via this Login page.

To reset your password:

- On the Login page, click the Forgot your password? hyperlink. The Enter your email to receive a reset link prompt will appear.
- Enter your account **Email** and click **OK**. The site will send you an email with a password reset link. Follow the instructions provided.

Configuring Settings

Chapter Overview



You must tap the settings icon in the top right of the screen to access the settings table.

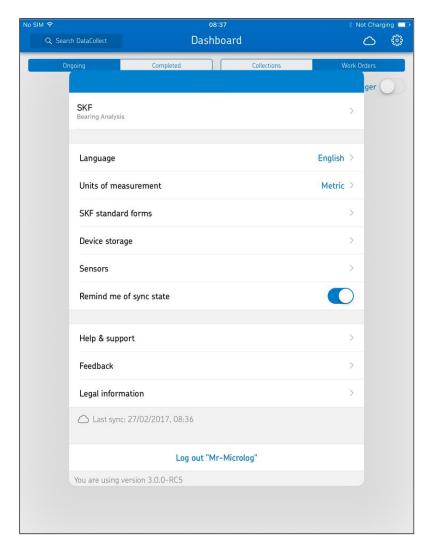


Figure 3 - 1. Settings Table.

Each of the sections in this chapter describes an individual element within the settings table.

Manage Your Companies and Groups

If you are assigned to more than one company and/or group, you must select the company and/or group for which you are preparing to collect data.

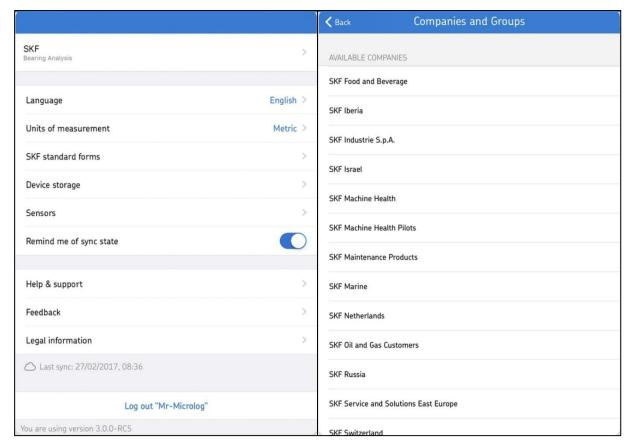


Figure 3 - 2. Selecting a Company or a Group.

To select your company:

- Tap the companies and groups section at the top of the table (shows a company name and a group name). The **Companies and Groups** table will appear.
- Tap to select the appropriate company from the Available Companies list. DataCollect will load the selected company.

To select your group within the company:

- Return to the **Companies and Groups** table. The **Available Groups** list only includes groups associated with the selected company.
- Tap to select the appropriate group from the Available Groups list.
- Tap **Back** to return to the settings table. You will now be working in DataCollect as a member of the selected group.

Set Your Language

To select your language:

- Tap the Language section. The language table appears.
- From this list of available languages, tap to select the language with which you will work in the DataCollect app.
- Tap **Back** to return to the settings table. DataCollect will then refresh to display the selected language.

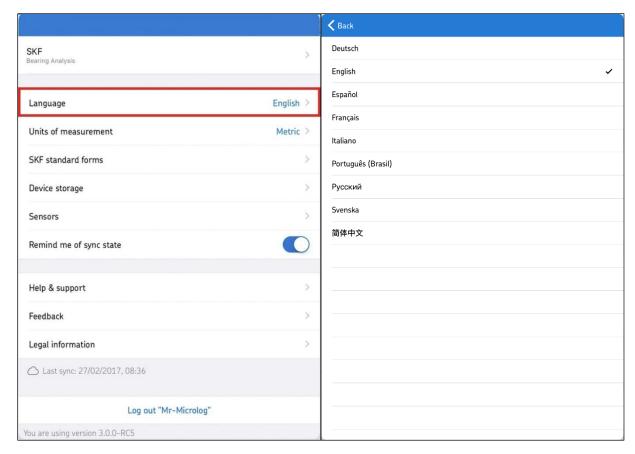


Figure 3 - 3. Selecting a Language.

Set Your Units of Measurement

To select your units of measurement:

- Tap the **Units of measurement** section. The units of measurement table appears.
- Tap to select either **Metric** or **Imperial** as the measurement system with which you will work in the DataCollect app.
- Tap **Back** to return to the settings table.

Subsequently, when you are working on any vibration question, you will be collecting data in the selected units of measurement.

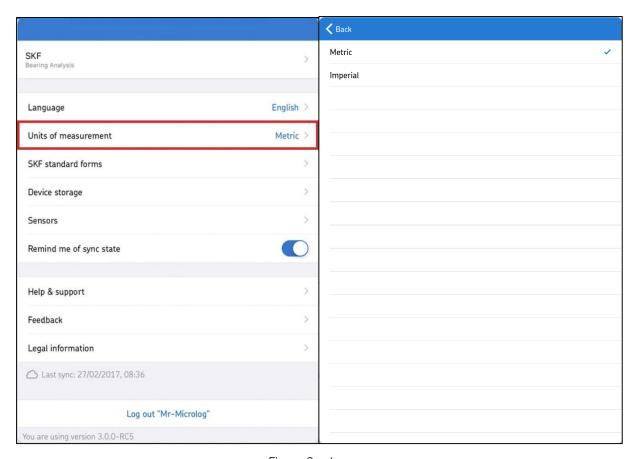


Figure 3 - 4. Selecting Units of Measurement.

Enable SKF Standard Forms

When you are first using DataCollect for a specific company, the app can prompt you to select the SKF standard forms you wish to enable. Alternatively, you can select the SKF standard forms you wish to have enabled (or disabled) via the **Settings** table.

> SKF standard forms are used in vibration measurement data collection.

To enable or disable SKF standard forms:

- Tap the **SKF standard forms** section. The SKF standard forms table will appear.
- For any of the forms in the table, tap **enable** or **disable** to make your selection.
 - > The blue option will represent the selected state.
- Tap Back to return to the settings table. The enabled forms will now be available for selection from the + Add a Collection button in the Dashboard view.

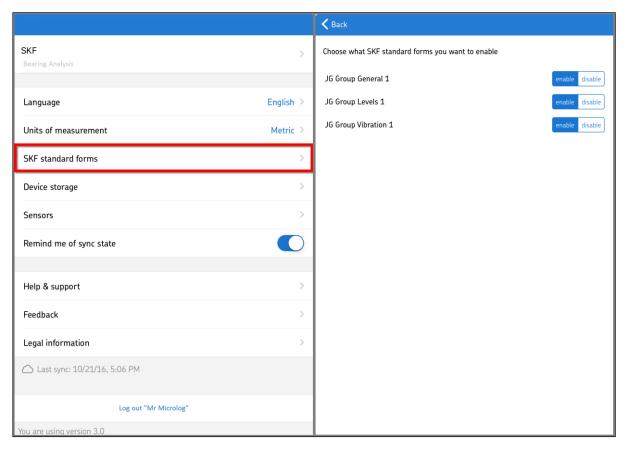


Figure 3 - 5.
Selecting the SKF Standard Forms to Enable.

Review Device Storage

The **Device storage** table displays the iPad's overall storage capacity and current free space, as well as the amount of space currently utilized for **Collection data**, **Media files that are always downloaded during sync**, and **Media files that are temporarily stored on your device**. See the **Device storage** table for more information on these storage categories.

From this table, you can also clear temporary media files from the device memory.

To clear temporary media files:

- Tap the **Device storage** section. The device storage table appears.
- Tap **Remove temporary media files from this device**. All temporary media files will be deleted from the device memory.
- Tap **Back** to return to the settings table.

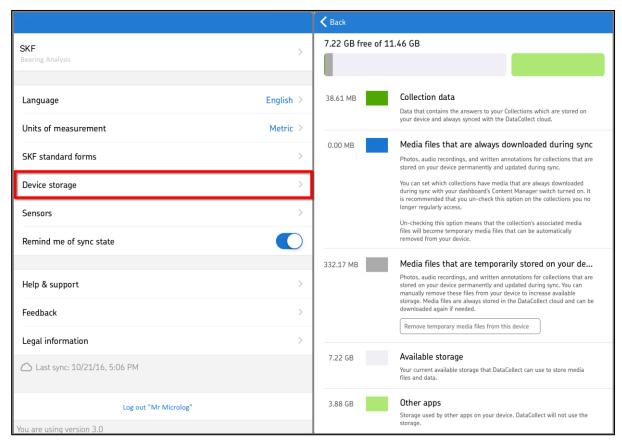


Figure 3 - 6. Device Storage.

Manage App Behavior with Known Sensors

Within the **Sensors** table, you can manage DataCollect's behavior when known sensors (any sensors to which the app has connected previously) are within range.

To remove a known sensor from the list (forget the sensor):

- Tap the **Sensors** section. The sensors table will appear.
- Tap **Remove** next to any known sensor that you wish to have DataCollect to forget.

To set DataCollect to automatically connect to a known sensor when in range:

• While viewing the **Sensors** table, tap or slide the **Automatically connect to a sensor** switch to the right so it shows as blue (for "on").

Subsequently, when you are working on any vibration question and a known sensor is in range, DataCollect will automatically connect to that sensor. If more than one known sensor is in range, DataCollect will connect to the first sensor that it recognises. As a result, you may need to select another known sensor from within the question.

You can tap **Back** to return to the settings table at any time.

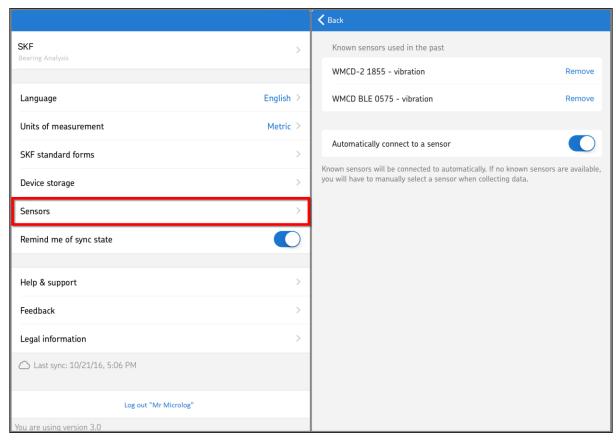


Figure 3 - 7. Sensors.

Set Synchronization Reminders

To set "unsynched data" reminders:

 Tap or slide the Remind me of sync state switch to the right to activate a reminder of synchronisation.

Subsequently, whenever you launch the app after exiting completely (and thereafter every 30 minutes) and have unsynched data, a reminder to <u>synchronise</u> will appear at the top of the Dashboard.

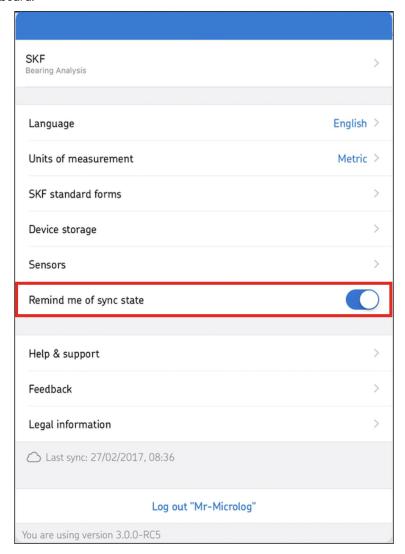


Figure 3 - 8.

Review Important Information

Additional available sections are as follows:

Help & support – tap to view help content.

Feedback – tap to start an email to IT Service for the purpose of providing application feedback.

Legal information – tap to review DataCollect terms and conditions (including warranty disclaimer and limitation of liability, copyright, trademarks and patents, and changes information), privacy policy, and ownership information.

Last sync – displays the date and time at which your app last synced with the cloud (web interface).

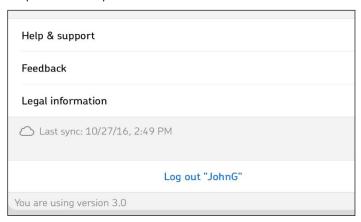


Figure 3 - 9. Other Settings Sections.

Log out of DataCollect

To log out of your current DataCollect session:

 Tap Log out "<YourName>." Your current session will end and the DataCollect Login screen will appear.

Completing Work Orders

Chapter Overview

DataCollect work orders are processes that users follow to collect relevant data with their iPad. These processes are comprised of steps, collections, question categories, and questions. Each process/work order includes at least one step, each step includes at least one collection, and each collection includes at least one question category. Question categories include the questions used for collecting data.

To complete a work order, you will proceed through a series of screens to get to the necessary questions required to collect your data. The usual progression through the DataCollect screens for work orders is as follows:

- 1. Select a work order on the Dashboard
- 2. Select a step within the work order
- 3. Select a collection within the step
- 4. Select the first question to begin collection of data

It is important that you synchronize data before you select a work order, so that you can be sure you are working with the most current version of that work order (including any data that has already been collected and saved). Likewise, it is important that you synchronize data after you have completed data collection work, so you can be sure that collected data is saved and will be available to you and others moving forward.

This chapter provides instructions on the entire process of completing work orders, including synchronisation, selection of the appropriate work order, progression through the different screens, and ultimately the collection of data.

Synchronize Data



Within the DataCollect app, a synch to/from cloud icon will appear in the top right of the screen, next to the settings icon at all times. You can tap this icon at any time to upload data to and/or download data from the DataCollect web interface. DataCollect will synchronise all work order and collection data as well as applicable media content with the web interface.

Synch to/from cloud icon states are as follows:

- Solid downward arrow setup data ready for download. Tap to download.
- Solid upward arrow collected data ready for upload. Tap to upload.
- Scrolling downward arrow download is in progress.
- Scrolling upward arrow upload is in progress.
- Empty and stationary synchronisation is complete. Tap to search the web interface for new data.
- Slowly moving (hovering) searching web interface for new setup data.

If an exclamation mark appears inside of the cloud icon, a conflict between the app data and the web interface data has been identified. The app will ask you whether you wish to keep your version, the remote version or both.

About Media Content Download Options

To enable faster download times, it is recommended that you limit the media file (photos, audio recordings, and written annotations) downloads taking place during synchronisation. For example, you may choose not to download media for work orders that you no longer regularly access. On the Dashboard, work order and step screens, a **Content manager** switch appears near the top right of the screen. Slide this switch to the right to turn on media content management options, which will enable you to specify the work orders, steps, or collections for which media files will or will not be downloaded during synchronisation with the DataCollect web interface.

To manage media file downloading:

- Slide the **Content manager** switch to the right. Content management options appear beneath each work order in the list.
- Tap within any circle to toggle between the options for that work order:

Media is not downloaded during sync – Media associated with the work order will not download during synchronization with the DataCollect web interface.

Media is always downloaded during sync – Media associated with the work order will always download during synchronization with the DataCollect web interface.

• Slide the **Content manager** switch to the left to hide content management options.

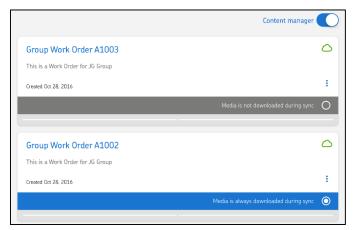


Figure 4 - 1.

Dashboard with Content Manager Enabled.

Select a Work Order from the Dashboard

With **Work Orders** selected at the top right of the screen, the **Dashboard** contains a list of all work orders that are available to you. From the **Dashboard**, you can start processing new work orders, continue in-progress work orders, and review completed work orders. By default, the work orders shown are those currently in an "ongoing" status. To see all work orders you may access orders that are currently in a "completed" status, by tapping the **Completed** option at the top of the screen.

➤ Tap the **Collections** option at the top right of the **Dashboard** to see ongoing or completed <u>standalone collections</u> that you may access.

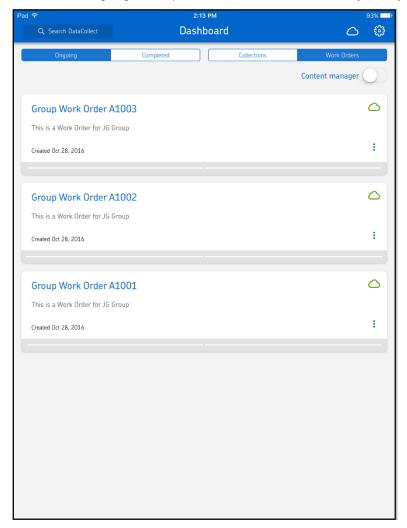


Figure 4 - 2. **Dashboard**.

To find a specific work order:

- Tap within the **Search DataCollect** box to bring up the search view and keyboard.
- Enter text and tap to select **Work Orders**. The list will filter to display only work orders with names or descriptions containing the text entered.
- Tap to select **Ongoing** or **Completed** to display only work orders with the selected status.

OR

- Swipe downward from the top of the screen to reveal the **Search** box.
- Tap within the box to bring up a keyboard.
- Enter text and tap to select **Ongoing** or **Completed**. The list filters to display only work orders in the selected status with names or descriptions containing the text entered.

For each work order listed, the name, description (if included), and creation date are displayed in its information bar.

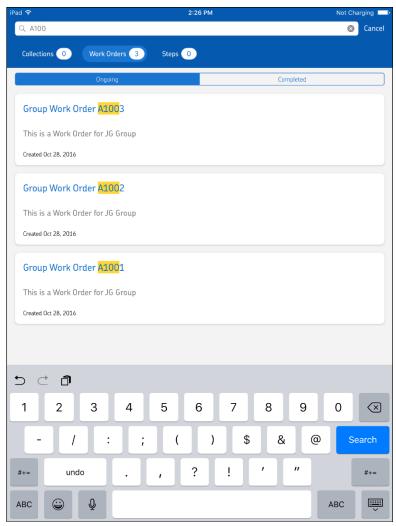


Figure 4 - 3. Finding a Work Order.

To select a work order for processing and/or review:

• Tap a work order to select it for processing and/or review. The work order will load on the screen, and you can select the steps for which you must collect data.

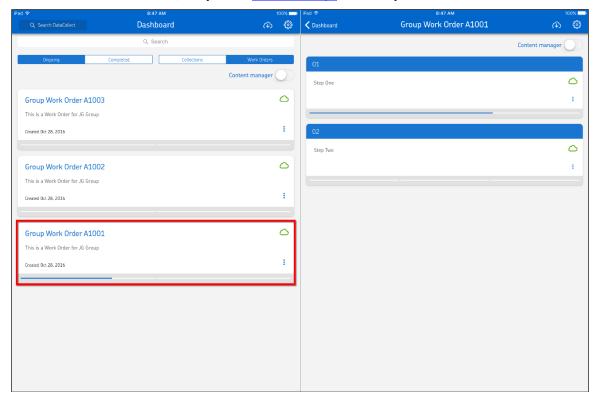


Figure 4 - 4. Selecting a Work Order.

To mark an ongoing work order as complete:

- Tap the options button within the appropriate work order.
- From the resulting menu, select **Set to complete**. DataCollect will remove the work order from the **Ongoing** work orders list.
 - ➤ To view completed work orders, tap **Completed** at the top of the screen.



Figure 4 - 5. Selecting a Set to Complete.

To synchronise an individual work order's data:

- If the work order's synch status cloud button is grey and contains a downward arrow, setup data and/or media files (asset images) associated with the work order have not been downloaded from the web interface.
 - Tap either the work order's synch status cloud button or the synch to/from cloud button in the header area to initiate download of the applicable files.
 - > To download a work order's media files, its selected content management option must be **Media is always downloaded during sync**.
- If the work order's synch status cloud button is red and contains an upward arrow, data collected for the work order have not been uploaded to the web interface.
 - Tap either the work order's synch status cloud button or the synch to/from cloud button in the header area to initiate upload of the applicable data.
 - If an exclamation mark appears inside either of the synch status cloud buttons, a conflict between the app data and the web interface data has been identified. The system will ask you whether you wish to keep your version, the remote version or both.

About Work Order Alarm Statuses

An individual work order's information bar will contain a red alarm if one or more of its steps has a red alarm status. The information bar will contain a yellow alarm if one or more of the work order's steps has a yellow alarm status (and none have a red alarm status).

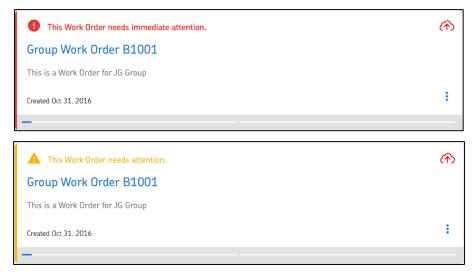


Figure 4 - 6. Work Orders with Red and Yellow Alarm Statuses.

Select a Step from the Work Order Screen

Once you have selected a work order, it will load on the screen with all included steps displayed. From here, you can start processing new work order steps, continue in-process steps or review completed steps.

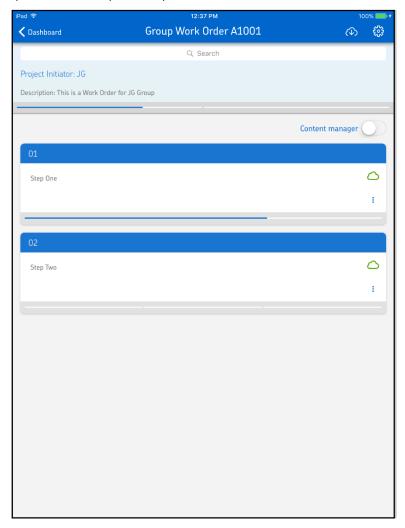


Figure 4 - 7. Work Order Screen.

To view basic information about the work order:

 While viewing the work order screen, swipe downward. The work order information will appear, including:

Search box – enables you to search for specific steps.

Project Initiator – administrator who created the work order in the DataCollect web interface.

Description – the description entered when the work order was created via the web interface.

There is a progress bar at the bottom of the work order information. As steps are completed within the work order, a blue line will be displayed in the progress bar in the order that the steps are completed (see the figure above).

To find a specific step:

- Swipe downward from the top of the screen to reveal the Search box.
- Tap within the box to bring up a keyboard.
- Enter text. The list will filter to display only steps in the selected work order with step numbers or names containing the text entered.

To select a step for processing and/or review:

• Tap step to select it for processing and/or review. The step will load on the screen, and you can <u>select the collections</u> for which you must collect data.

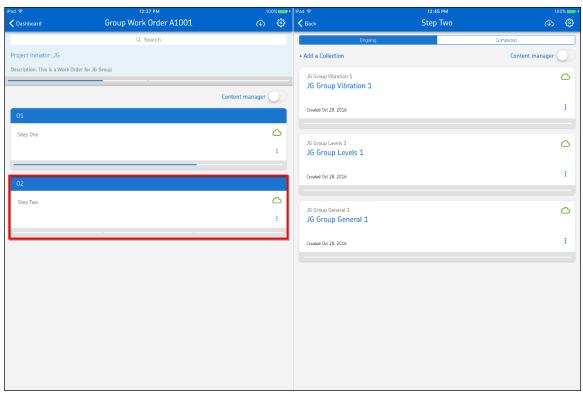


Figure 4 - 8. Selecting a Step.

To mark an ongoing step as complete:

- Tap the options button within the appropriate step.
- From the resulting menu, select **Set to complete**. DataCollect will set the step to complete and a checkmark will appear in the step's information bar.



Figure 4 - 9.
Selecting Set to Complete.

To synchronise an individual step's data:

- If the step's synch status cloud button is grey and contains a downward arrow, setup data and/or media files (asset images) associated with the step have not been downloaded from the web interface.
 - Tap either the step's synch status cloud button or the synch to/from cloud button in the header area to initiate download of the applicable files.
 - To download a step's media files, its selected content management option must be **Media is always downloaded during sync**.
- If the step's synch status cloud button is red and contains an upward arrow, data collected for the step have not been uploaded to the web interface.
 - Tap either the step's synch status cloud button or the synch to/from cloud button in the header area to initiate upload of the applicable data.
 - If an exclamation mark appears inside the step's synch status cloud icon, a conflict between the app data and the cloud data has been identified. The system will ask you whether you wish to keep your version, the remote version or both.

About Step Alarm Statuses

An individual step's information bar will contain a red alarm if one or more of its collections has a red alarm status. The information bar will contain a yellow alarm if one or more of the step's collections has a yellow alarm status (and none have a red alarm status).

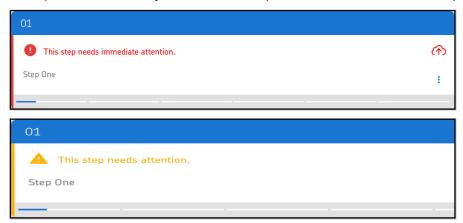


Figure 4 - 10. Steps with Red and Yellow Alarm Statuses.

Select a Collection from the Step Screen

Once you have selected a step, it will load on the screen with all included collections displayed. From here, you can start processing new collections, continue in-process collections or review completed collections.

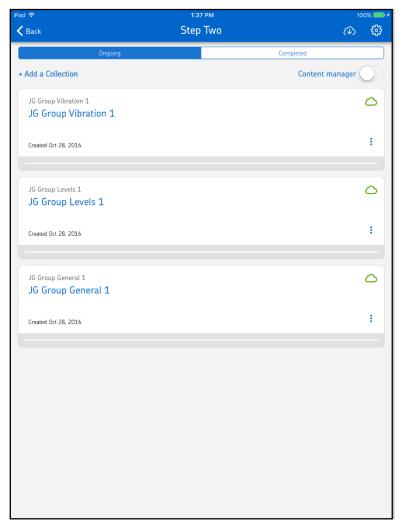


Figure 4 - 11. Step Screen.

To find a specific collection:

- Swipe downward from the top of the screen to reveal the **Search** box.
- Tap within the box to bring up a keyboard.
- Enter text and tap to select **Ongoing** or **Completed**. The list will filter to display only collections in the selected status with names containing the text entered.

To add a collection:

- Tap + Add a Collection and select one of <u>your company's available forms</u> to add a collection based on that form.
 - > Only collections that have already been assigned to the work order's process via the web interface are available for addition.



Figure 4 - 12. Adding a Collection.

To select a collection for processing and/or review:

• Tap the appropriate collection. The collection will load on the screen, and you can <u>select</u> the question categories for which you must collect data.

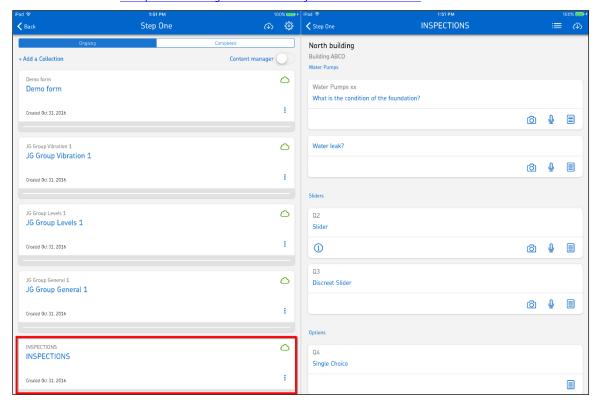


Figure 4 - 13. Selecting a Collection.

To mark an ongoing collection as complete:

- Tap the options button within the appropriate collection.
- From the resulting menu, select **Set to complete**. DataCollect will remove the collection from the **Ongoing** collections list.
 - To view completed collections, tap **Completed** at the top of the screen.



Figure 4 - 14. Selecting Set to Complete.

To synchronize an individual collection's data:

- If the collection's synch status cloud button is grey and contains a downward arrow, setup data and/or media files (asset images) associated with the collection have not been downloaded from the web interface.
 - Tap either the collection's synch status cloud button or the synch to/from cloud button in the header area to initiate download of the applicable files.
 - To download a collection's media files, its selected content management option must be **Media is always downloaded during sync**.
- If the collection's synch status cloud button is red and contains an upward arrow, data collected for the collection have not been uploaded to the web interface.
 - Tap either the collection's synch status cloud button or the synch to/from cloud button in the header area to initiate upload of the applicable data.
 - If an exclamation mark appears inside the collection's synch status cloud icon, a conflict between the app data and the cloud data has been identified. The system will ask you whether you wish to keep your version, the remote version or both.

To edit a collection's image, name, or description:

- Tap the options button within the appropriate collection and select Edit collection. The
 collection will become editable.
- Tap the name or description field to select and use the on-screen keyboard to edit text if necessary.
- Tap the camera button and select from the options Take photo or Select photo to
 access your iPad's camera respectively image repository to get an image appear in the
 collection image box.
- Tap **Remove Image** to remove any image already selected for this collection.
- Tap outside of the collection to set changes.

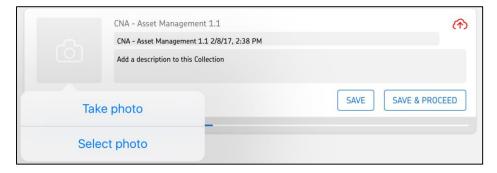


Figure 4 - 15. Editable Collection with Image Search Selected.

About Collection Alarm Statuses

An individual collection's information bar will contain a red alarm if one or more of its questions has a red alarm status. The information bar will contain a yellow alarm if one or more of the collection's questions has a yellow alarm status (and none have a red alarm status).

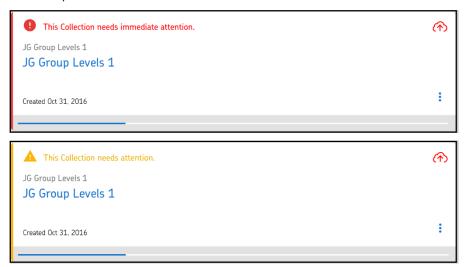


Figure 4 - 16.
Collections with Red and Yellow Alarm Statuses.

Work with Questions on the Collection Screen

Once you have selected a collection, it will load on the screen with all included questions displayed. From here, you can select the questions for which you must perform your data collection.

- You can only answer questions for a collection that has the status "ongoing".
- For information on the types of questions found on this screen, see <u>Complete an EAN/QR Code Scan Data Collection Question Type</u>, <u>Complete a Vibration Measurement Question Type</u> and <u>Complete All</u> <u>Other Data Collection Question Types</u>.

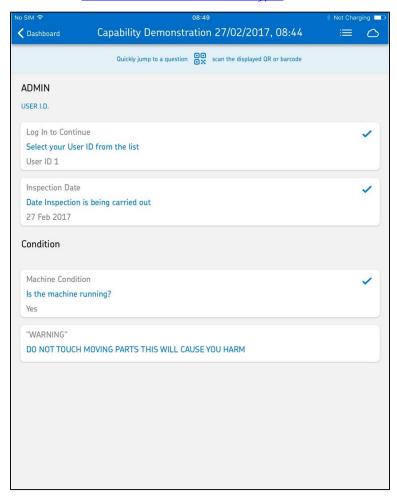


Figure 4 - 17. Collection Screen.

To view a collection's categories and/or questions in an overview/summary view:



- Tap the summary view icon on the top right of the collection screen. The collection screen will collapse to display an overview/summary only, including:
 - category names, descriptions and statuses, where applicable
 - section names, where applicable, and
 - question names and statuses.
- Tap the appropriate filter button at the top of the screen to filter the overview/summary accordingly:
 - All Questions (default) display all of the collection's questions
 - **Answered** displays the collection's answered questions only
 - Unanswered displays the collection's unanswered questions only
- Tap on a question in the view to begin working with that question.

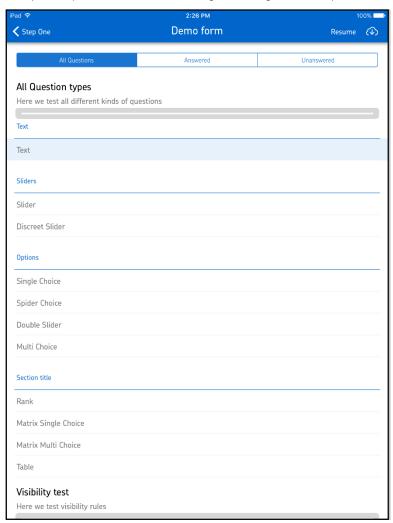


Figure 4 - 18.
Collection Overview/Summary View Screen.

To return to the collection screen's normal view:



Tap **Resume** in the top right of the collection overview/summary view.

To view basic information about the collection (when in normal view):

• While viewing the collection screen, swipe downward. The collection information appears, including:

Project Initiator – administrator who created the work order in the DataCollect web interface.

Description – the description entered when the work order was created via the web interface.

A progress bar appears at the bottom of the collection information. As questions are completed within the collection, a blue line displays in the progress bar in the order that the questions are completed (see the figure above).

To quickly jump to a question by scanning its EAN barcode or QR code (when in normal view):



If an operator's data collection activities include scanning EAN barcodes and/or QR codes to lead them to specific questions, they can access the code scanner for this purpose.

- While viewing the collection screen, swipe downward. A "Jump to Question" EAN/QR
 code scanner icon will appear at the top of the screen, above the collection information
 area.
- Tap the EAN/QR code scanner icon. A camera view area will appear.
- Use the viewfinder to point the camera at the desired barcode or QR code, ensuring that the code fits within the green box on the screen and appears straight and even in relation to the hox and the red line.

• If the app does not do so automatically, tap the screen to focus and capture the code.

The app uses the code's data to locate and navigate to its associated question. A question window will appear with the question associated with the scanned code.

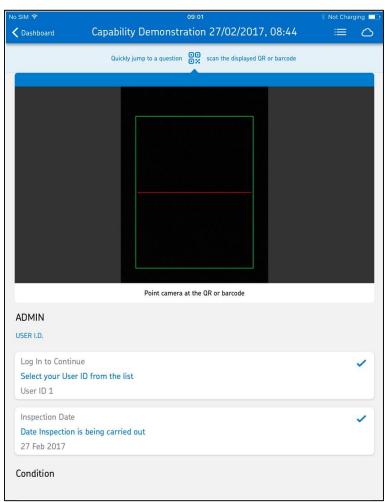


Figure 4 - 19. Jump to Question Feature.

To begin collecting data:

 Use either the "Jump to Question" EAN/QR code scanner feature described above or tap within the panel of the first question that you intend to complete. A question window will appear.

The question window displays the question title and image (if applicable), the question itself, icons for additional information (if configured), and a specific question type (text box, multiple selections, date wheel, etc.).

Perform the required action(s) in response to the question.

IMPORTANT: For details on each of the question types and how to complete them, see <u>Complete an EAN/QR Code Scan Data Collection Question Type</u>, <u>Complete a Vibration Measurement Question Type</u>, and <u>Complete All Other Data Collection Question Types</u>.

- Attach an image, sound, or note as appropriate (see details below).
- If necessary, tap the information icon to review the help text and images associated with the question.
- Tap the next arrow to move to the next question (or the previous arrow to return to the previous question).
- Continue until you have responded to all questions. As you answer questions, the progress bars on the previous screens will begin to populate accordingly.

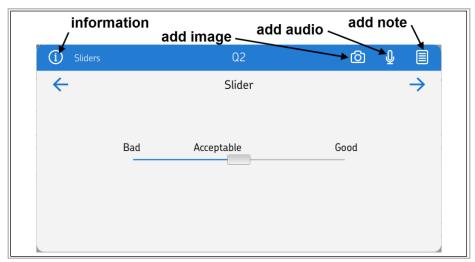


Figure 4 - 20.

A Question Window with Attachments Enabled and an Information Icon.

To add an image to a response:

If response images have been enabled for the question, a camera icon will appear in the question's information bar on the collection screen or at the top of the questions's own window. The instructions below are for adding an image from the question window.

• Tap the camera icon. A **Photos** window appears.

• Tap the add (+) button at the top right of the window and select the appropriate option from the resulting context menu:



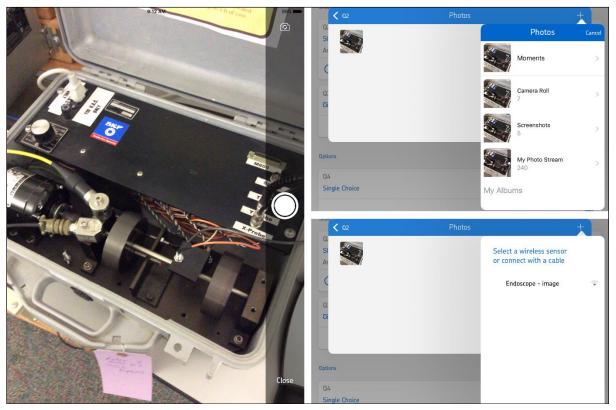
Figure 4 - 21. Add an Image Context Menu.

Take photo – Tap to access your iPad's camera and take a picture to add to the question. A camera display window appears. Tap the switch camera icon at the top of the camera display window as necessary to switch between forward and backward facing cameras. Aim your camera and tap the white circular button to capture the photo. Select **Retake**, **Edit Photo**, or **Use Photo** as appropriate. Once you have selected a photo to use, tap **Close**.

➤ If prompted that the app does not have access to your photos, go to your iPad Settings and select Privacy > Camera, then enable the app to access your camera.

Select photo – Tap to access your iPad's image repository and select a picture to add to the question. A photo selection table appears. Tap the appropriate location and then select the desired image.

➤ If prompted that the app does not have access to your photos, go to your iPad Settings and select Privacy > Photos, then enable the app to access your photos.



Use a sensor – Tap to access a connected, photo-ready sensor and take a picture to add to the question.

Figure 4 - 22.
Clockwise from Left: Take Photo, Select Photo, Use a Sensor.

> The same photo options are available if you tap the camera icon in the question's information bar on the collection screen.

DataCollect attaches the captured/selected image to the question, as indicated by a thumbnail of the newly added image in the **Photos** window. You can tap the back button to return to the question window.

To view images already added to a response:

If images have been added in response to the question, the number of images will appear above the camera icon in the question's information bar on the collection screen.

- Tap the camera icon. Any images already added in response to the question appear below the question's information bar.
- Tap any image thumbnail to view it in full screen mode.
 - You can swipe left and right to view any other images associated with this question.
 - You can tap **Edit** to open the current image in a basic image editor or tap the delete (trash can) icon to delete the current image.
- Tap **Back** to return to the collection screen.

To add audio to a response:

If response audio has been enabled for the question, a microphone icon will appear in the question's information bar on the collection screen or at the top of the questions's own window. The instructions below are for adding a sound from the question window.

- Tap the microphone icon. A Audio window will appear.
- Tap the add (+) button at the top right of the window. A **Record audio** window appears.
 - If prompted by DataCollect to allow access to the microphone, tap **OK**.

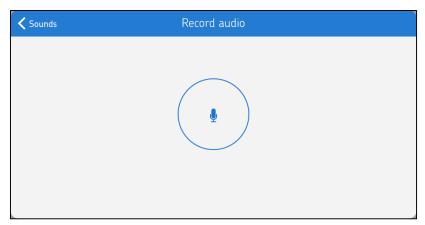


Figure 4 - 23.
Record Audio Window.

• Tap the record audio button (in the middle of the window) to record a audio to add to the question. Tap the button again to stop recording the audio.

- Tap Sounds (back) to return to Sounds window.
 - The same record audio function is available if you tap the microphone icon in the guestion's information bar on the collection screen.

DataCollect attaches the captured audio to the question, as indicated by a thumbnail of the newly added sound in the **Sounds** window. You can tap the back button to return to the question window.

To hear audio already added to a response:

If audio has been added in response to the question, the number of recordings will appear above the microphone icon in the question's information bar on the collection screen.

- Tap the microphone icon. Any recordings already added in response to the question appear below the question's information bar.
- Tap any recording thumbnail to hear it.

To add a note to a response:

If response notes have been enabled for the question, a note icon will appear in the question's information bar on the collection screen or at the top of the question's own window. The instructions below are for adding a note from the question window.

- Tap the note icon. A **Notes** window will appear.
- Tap the add (+) button at the top right of the window. A **New note** window appears.

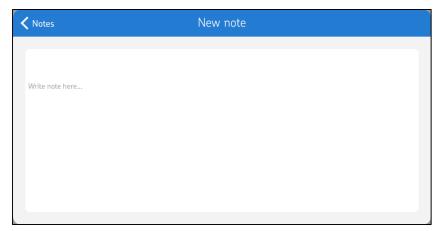


Figure 4 - 24. New Note Window.

- Tap within the note text box and use the on-screen keyboard to add text as necessary (maximum 5 000 characters).
- Tap Notes (back) to return to Notes window.
 - The same new note function is available if you tap the note icon in the question's information bar on the collection screen.

DataCollect will attach the note to the question, as indicated by a thumbnail of the newly added note in the **Notes** window. You can tap the back button to return to the question window.

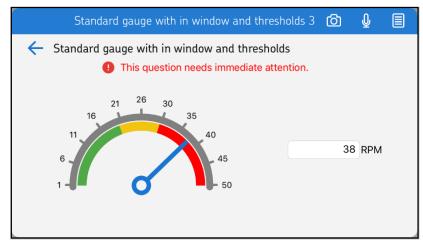
To view or edit notes already added to a response:

If notes have been added in response to the question, the number of individual notes will appear above the note icon in the question's information bar on the collection screen.

- Tap the note icon. Any individual notes already added in response to the question will appear below the question's information bar.
- Tap any individual note to edit it.

About Question Alarm Statuses

The question window will display a red alarm if, based on criteria set in the form template, the numerical value entered has triggered a red alarm status. The window will display a yellow alarm if, based on criteria set in the form template, the numerical value entered has triggered a yellow alarm status.



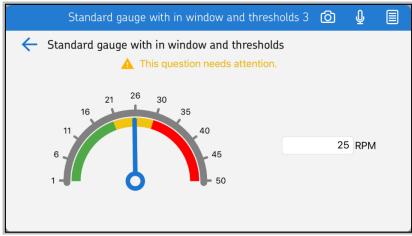


Figure 4 - 25.

Questions in Red and Yellow Alarm Statuses.

You can use the code scan feature during data collection as a means of obtaining machine information (ID, type, bore size, rpm, etc.) with a simple scan of an EAN barcode or QR code. This feature is enabled if the form template has been appropriately configured via the web interface to include instructions for reading specific EAN barcodes and/or QR codes.

The scan feature can be used with individual text or vibration questions or an entire section of text questions.

To respond to a question or set of questions by scanning an EAN or QR code:

If a question or section has been configured to use the EAN/QR code scanner feature, the EAN/QR Code scanner icon will appear.

- Tap to launch the scanner feature.
- Point the camera at the desired barcode or QR code, ensuring that the code fits within the green box on the screen and appears straight and even in relation to the box and the red line.
- If the app does not do so automatically, tap the screen to focus and capture the code.

The app uses the code's data string to respond to the question or set of questions:

- When you scan an EAN code for a text question, the app will use that code's data string as a response to that question.
- When you scan a QR code for a text question, the app will use a specific portion of that code's data string (per configuration in the form template) as a response to that question.
- When you scan a QR code for a vibration question, the app will use specific portions
 of that code's data string (per configuration in the form template) as responses to
 that guestion.

 When you scan a QR code for a section of text questions, the app will use specific portions of that code's data string (per configuration in the form template) as a responses to those questions.

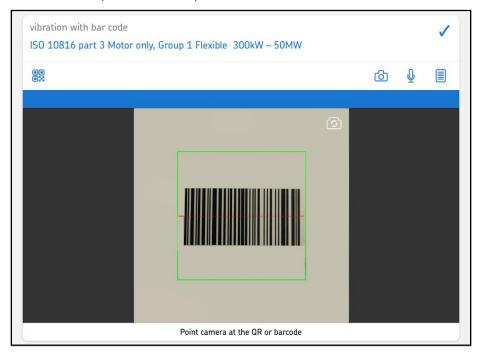


Figure 4 - 26. EAN/QR Code Scanner Feature.

Complete a Vibration Measurement Question Type

You can use the DataCollect with the SKF QuickCollect sensor to record vibration measurements. This feature will be enabled if the form has been appropriately configured to include vibration measurement.

To complete a vibration measurement question type:

- Tap to select the question containing the vibration measurement requirement that you
 intend to complete. The question screen will appear. For vibration questions, this screen
 typically includes a picture or schematic of the asset and nodes indicating the locations
 on the asset where measurements will occur.
 - The vibration question can either be configured to Trending mode or Diagnostic mode by the administrator. If Diagnostic mode is selected, a Diagnostic Request button will be displayed at the bottom of the screen.
 - ➢ If a measurement collection discovered amber or red conditions for any point, tap **Diagnostic Request**. DataCollect will send the vibration measurement data directly to an SKF expert, who will analyse the data and contact you with recommendations.
 - ➤ If no schematic was included with the form, or if you are <u>collecting</u>

 <u>@Aptitude Analyst ROUTE data</u>, you will see individual bars across the screen representing each measurement to be completed.

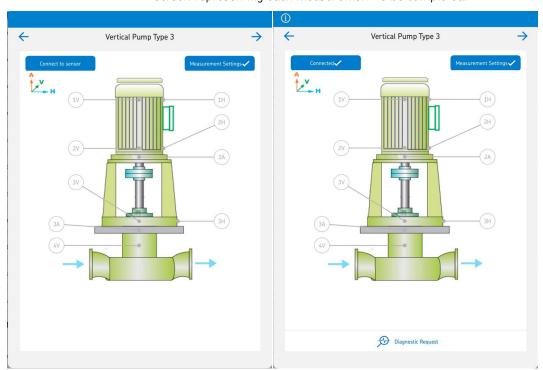


Figure 4 - 27.

Question Screen for Vibration Measurement (trending selected on the left and Diagnostic request enabled on the right).

- If you are using an SKF QuickCollect sensor (or other Bluetooth sensor) and have not already done so, turn on the sensor. If you are using a wired sensor, make sure that the sensor is connected to your iPad.
- When the sensor is ready, tap **Connect to sensor** and select the appropriate sensor from the resulting menu.
 - Depending on how the collection was configured, <u>DataCollect may automatically connect to the sensor</u>. If the button in the top left of the screen reads "Connected" and displays a checkmark, automatic connection has been established. To select a different sensor, tap the Connected button and select the appropriate sensor from the resulting menu. To disconnect from the connected sensor without selecting a different sensor, tap Disconnect sensor.



Figure 4 - 28. Selecting Sensor.

- Tap **Measurement settings**. The **Machine Settings** table will appear.
 - > Depending on how the collection was configured, the measurement settings associated with any given machine may already be defined. The settings may also be configured as read-only.
 - ➤ In some cases, measurement settings values may have been automatically populated via the <u>EAN/QR Code Scan Data Collection</u> <u>Feature</u>.

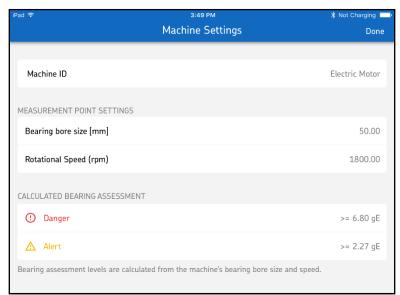


Figure 4 - 29. Measurement Settings: Defined.

If the **Machine Settings** are a) not already defined/populated or b) defined/populated but editable, you can make selections and enter values as described below.

To define vibration measurement settings:

- Tap within each section to enter the asset's **Machine ID**, **Bearing bore size**, and **Rotational Speed**.
 - DataCollect will calculate the appropriate bearing assessment levels according to ISO standards for the bearing bore size and rotational speed.
- Tap **Done** to set changes and return to the question screen.

To collect vibration data from the selected sensor:

- If the sensor is not already in place, mount it to the appropriate measurement point location on the asset.
- Tap the corresponding measurement point node on or next to the picture or schematic (tap the first bar if no schematic appears, for example if you are <u>collecting @ptitude</u> <u>Analyst ROUTE data</u>).

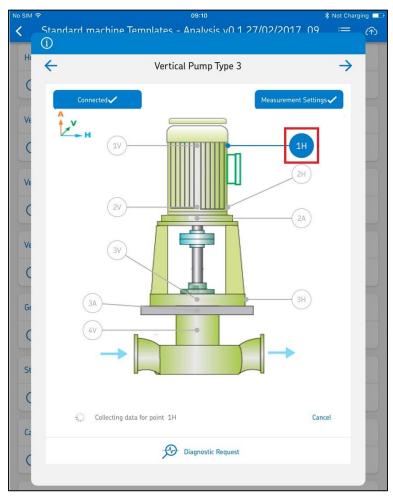


Figure 4 - 30. Collecting Data for Selected point.

DataCollect collects data from the sensor and compares that data to the velocity, enveloped acceleration, and/or temperature alarm thresholds configured for the measurement point. Based on these alarm thresholds, the measurement may result in any one of the following:

	Green measurement result button	Amber measurement result button	Red measurement result button
ISO (Vel)	Good	Alert	Danger
Bearing (gE)	Good	Alert	Danger
Temp	Good	Alert	Danger

If any reading turns to amber, and that is the highest alarm status present for the point, the measurement point's circle/node (or bar, if no schematic exists) will assume the amber alarm status.

If any reading turns to red, and that is the highest alarm status present for the point, the measurement point's circle/node (or bar, if no schematic exists) will assume the red alarm status.

If all readings for a measurement point turn green, the measurement point's circle/node (or bar, if no schematic exists) will also turn to green.

> For more information regarding alarm threshold configuration, refer to the *DataCollect Web Interface User Manual*.

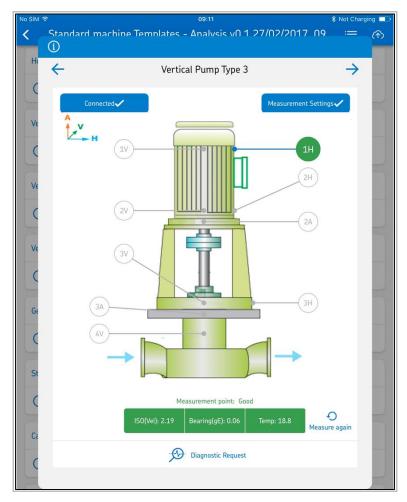
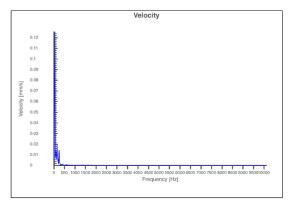


Figure 4 - 31. Measurement Results Examples.

- Review the measurement point data at the bottom of the screen.
- Tap the **ISO (Vel)** button to see a plot of the point's collected velocity measurement (the thresholds are set according to ISO Standard).

• Tap the **Bearing (gE)** button to see a plot of the point's collected enveloped acceleration measurement.



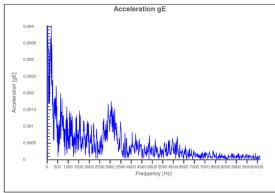


Figure 4 - 32. Measurement Plot Examples.

- Tap **Measure again** to retake the measurement, if appropriate.
- If required, move the sensor to the next measurement point location on the asset and repeat the steps above.
- Continue until all measurements for this question are complete.
 - Depending on how the collection was configured, a Diagnostic Request option may be available on the question screen. If the measurement collection discovered amber or red conditions for any point, tap Diagnostic Request. DataCollect will send the vibration measurement data directly to an SKF expert, who will analyse the data and contact you with recommendations.

Otherwise, when all measurements for this question are complete, you can move on to the next question or exit to a previous screen as necessary.

To review vibration data trends for a specific measurement point:

Depending on how the collection was configured, data trending may be enabled for its vibration questions. If this functionality is enabled, you will see a **Past measurements** button next to the measurement results for each point.

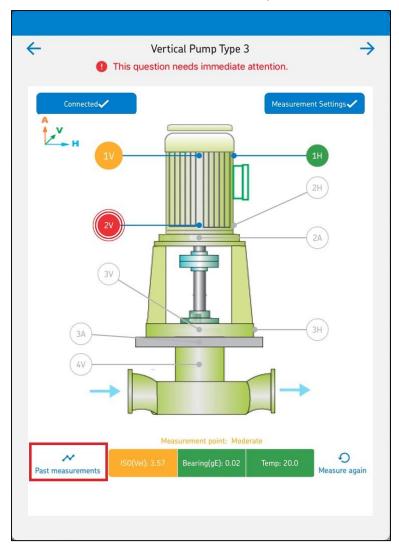


Figure 4 - 33.
Vibration Question with Past Measurements Button.

• With the appropriate point already selected and displaying measurement results, tap **Past measurements**.

- A past measurements screen will appear, displaying velocity, enveloped acceleration, and temperature trend plots for the point's previous five measurements.
 - > All previous measurements are accompanied by the dates on which they were recorded.

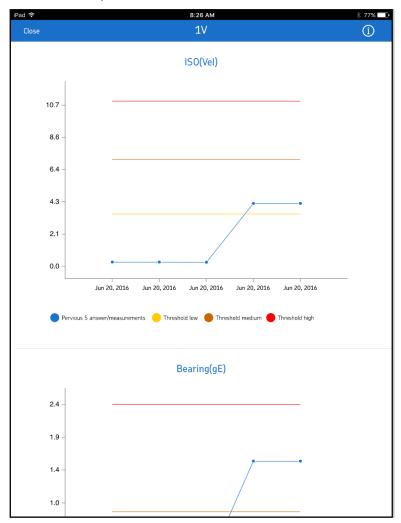


Figure 4 - 34.
Past Measurements Screen.

Complete All Other Data Collection Question Types

Other types of questions are available in DataCollect and are initially set up by an administrator in the Excel based form template or in Form Builder. The other available question types are listed below, followed by descriptions on later pages.

Question Types

- Calculation
- Country
- Date
- DiscreteSlider
- DoubleSlider
- InfoBar
- List
- MatrixMultiChoice
- MatrixSingleChoice
- MultiChoice
- Number
- Numeric
- Rank
- Signature
- SingleChoice
- Slider
- SpiderChoice
- Table
- Table2
- TableFixed
- Text
- ➤ The question types Country, InfoBar, SpiderChoice, Table2 and TableFixed can only be set up in the Excel based form template. They do not exist in Form Builder. "Country" is a part of the Choice question type in Form Builder.

Question Type Details

Calculation

Calculation question types are read-only and display results based on formulas configured in the collection's form template, which are then applied to specific **Number** question type responses completed elsewhere in the collection.

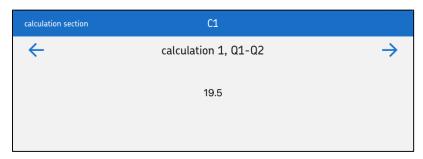


Figure 4 - 35. A Calculation Question.

Country

To complete the question in the app:

Tap the option that best describes the appropriate response.

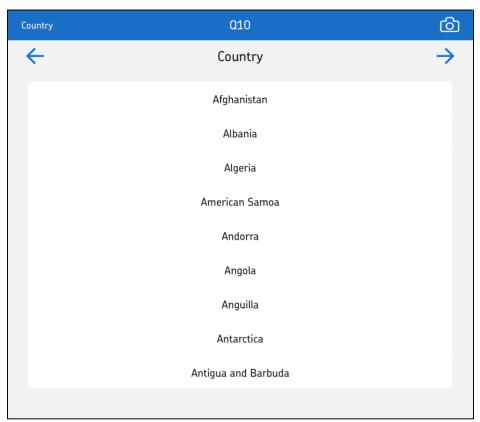


Figure 4 - 36. A Country Question.

Date

Appearance/Behavior in App	Date roller with current date as default.	
Config	Use Config to set permissible range.	
	Example: 2013-01-01 2017-12-31.	
	Add defaultValue= as necessary.	
	Example: defaultValue=2015-05-06 will result in a	
	default date selection of May 6, 2015.	

The Date question will only allow users to select a date that falls within the configured date range. You must therefore configure the Date question to include a wide range of dates (at least a few years in the future). If the date range is not configured, the initial date range may already have "expired" and users will not be able to select a valid date.

To complete the question in the app:

- Swipe or drag to roll each roller (month, day, and year) up or down and select the appropriate date.
 - If you need to remove the date at any time, tap **Remove date from** answer.



Figure 4 - 37. A Date Question.

DiscreteSlider

Appearance/Behavior in App	Numerical slider.
Config	min value step count max value Example: 0 1 10 will result in a slider ranging from 0 to 10 in steps of 1. Add defaultValue= as necessary.
	Example: defaultValue=1 will result in a default selection of 1.
Option Examples	0 Bad 5 Fair 10 Good

To complete the question in the app:

• Tap and hold the slider handle and drag left or right as appropriate to respond within the numerical range.

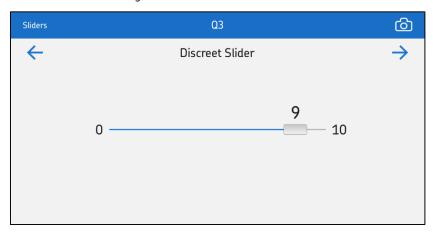


Figure 4 - 38. A DiscreteSlider Question.

DoubleSlider

Appearance/Behavior in App	Numerical slider used to specify an interval between minimum and maximum values.
Config	min value max value
	Example: 0 100 will result in a slider ranging from 0 to 100.
	Add defaultValue= as necessary.
	Example: defaultValue=10,90 will result in default selections of 10 and 90.

To complete the question in the app:

- Tap and hold each slider handle and drag either left or right as appropriate to respond within the numerical range.
 - > You can drag each handle separately or both simultaneously.

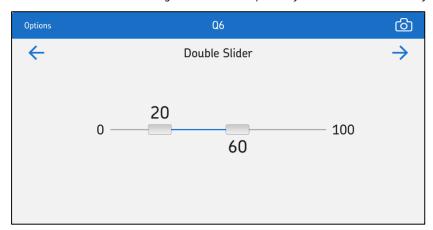


Figure 4 - 39. A DoubleSlider Question.

InfoBar

InfoBar question types are read-only and display information configured in the collection's form template.

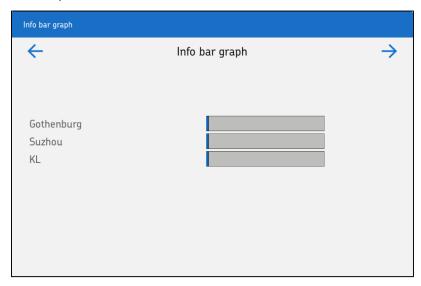


Figure 4 - 40. An InfoBar Question.

List

- Tap the cell in which you intend to add a value.
- Select an option or otherwise complete the information for each cell as it relates to the row/column.
 - Within the list cells, you may encounter questions similar to many of the other question types described in this section. For more information on a particular cell's functionality, see instructions for the corresponding question type.

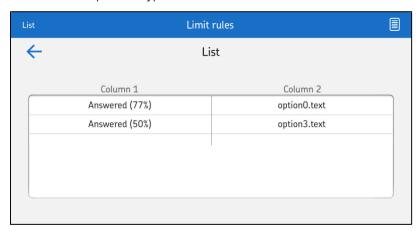


Figure 4 - 41. A List Question.

MatrixMultiChoice

Appearance/Behaviour in App	Matrix for selection of one or more of the preset options.
Config	Use Config to label the columns. Example: col0 col1 col2 Add defaultValue= as necessary.
	Example: defaultValue=0,1;0,1,2 will result in a default selection of columns 0 and 1 in the first row and columns 0, 1, and 2 in the second row.
Option Examples	Use Options to label the rows. Example: row0 row1 row2 row3

To complete the question in the app:

• For each row, tap one or more column option(s) that best describe(s) the appropriate response(s).

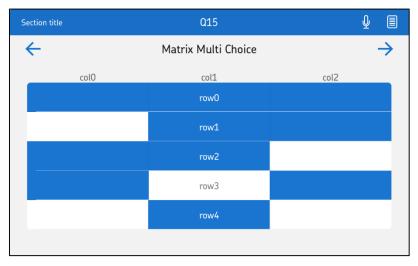


Figure 4 - 42. A MatrixMultiChoice Question.

MatrixSingleChoice

Appearance/Behaviour in App	Matrix for selection of one of the preset options.
Config	Use Config to label the columns.
	Example: col0 col1 col2
	Add defaultValue= as necessary.
	Example: defaultValue=1;1;3 will result in a default selection of column 1 in the first row, column 1 in the second row and column 2 in the third row.
Option Examples	Use Options to label the rows.
	Example:
	row0
	row1
	row2
	row3

- For each row, tap the column option that best describes the appropriate response.
 - > You can only select one option per row.

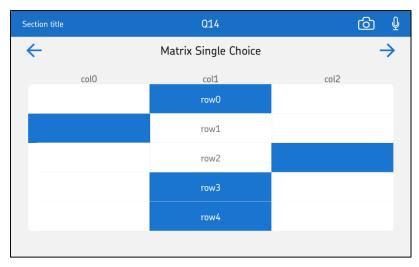


Figure 4 - 43. A MatrixSingleChoice Question.

MultiChoice

Appearance/Behaviour in App	Checkboxes for selection of one or more of the preset options.
Config	Add defaultValue= as necessary.
	Example: defaultValue=1,2,3 will result in default selections of 1,2, and 3.
Option Examples	0 Option #1
	1 Option #2
	2 Option #3
	3 Option #4

To complete the question in the app:

• Tap one or more option(s) that best describe(s) the appropriate response(s).

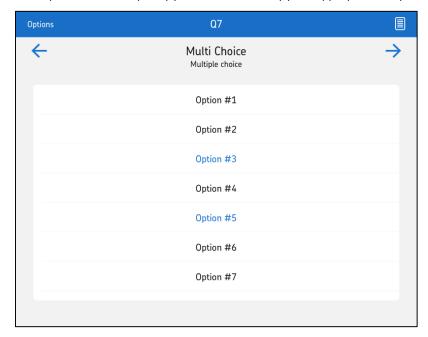


Figure 4 - 44. A MultiChoice Question.

Number

Appearance/Behaviour in App	Text entry limited to numeric values.
Config	defaultValue= lowerLimit= upperLimit= lowerThreshold= upperThreshold= units
	Example: defaultValue=99 lowerLimit=0 upperLimit=2000 lo werThreshold=10 upperThreshold=1500 cm will result in a text box that:
	 has a default value of 99
	will not accept negative values or values over 2000
	will mark values between 10 and 1500 as red text
	will be expressed in centimeters

To complete the question in the app:

• Tap the free-form text box, then enter a number in response to a question or as otherwise instructed.

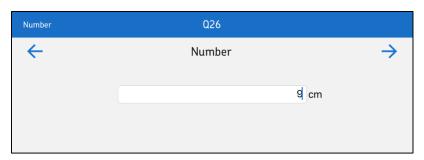


Figure 4 - 45. A Number Question.

Numeric

Numeric question types enable entry of numeric values that are subject to window and threshold rules. These rules determine whether the value entered should result in a red or yellow alarm condition for the question.

Appearance/Behavior in App	Text entry limited to numeric values.
Config	\$ defaultValue= inWindow= outWindow= windowLowerThreshold= windowUpperThreshold= lowerLimit= upperLimit=
	Example: \$ inWindow=40,60 windowLowerThreshold=10 windowUpperThreshold=20 will result in a text box that:
	 produces a red alarm for values in the range: >=40 and <=60
	 produces a yellow alarm for values in the range: >=30 and <40 OR >60 and <=80

> Refer to the *DataCollect Web Interface User Manual* for more details on configuring Numeric question types.

To complete the question in the app:

• Tap the free-form text box, then enter a number in response to a question or as otherwise instructed.

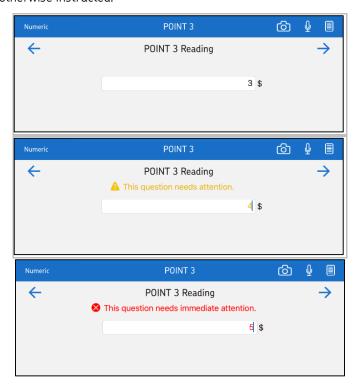


Figure 4 - 46.
A Numeric Question in Various States of Alarm.

Gauge numeric question types enable selection of numeric values via graphical user interfaces representing various types of gauges. These question types are subject to the same window and threshold rules as all numeric question types, resulting in red or yellow alarm conditions as appropriate.

To complete a circular gauge or standard gauge numeric question in the app:

- Press, hold, and drag the indicator along the gauge image.
- Release when you have reached the desired value.
 - Alternatively, you can tap within the text box to the right of the image to enter or edit the numeric value via the device keyboard.

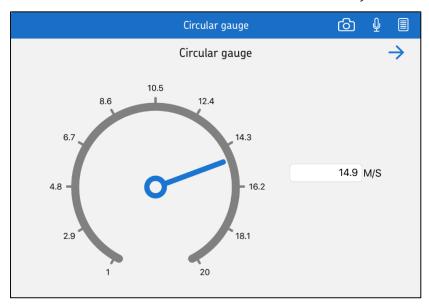


Figure 4 - 47. Circular Gauge Example.

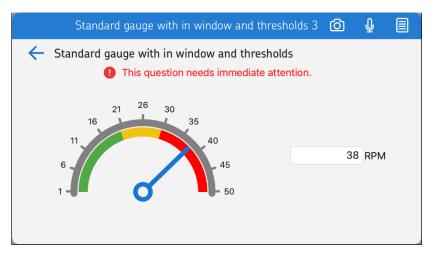


Figure 4 - 48. Standard Gauge Example (with Value Inside Red Alarm Condition Range).

To complete a level gauge or thermometer numeric question in the app:

- Tap within the gauge (or thermometer) at the desired value.
- To fine tune the value, press, hold, and drag the indicator along the gauge image.
- Release when you have reached the desired value.
 - Alternatively, you can tap within the text box to the right of the image to enter or edit the numeric value via the device keyboard.

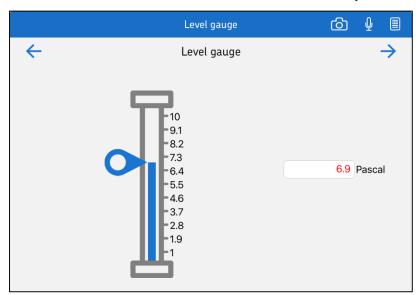


Figure 4 - 49. Level Gauge Example (with Value Inside Yellow Alarm Condition Range).

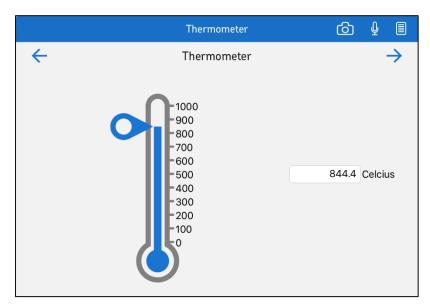


Figure 4 - 50. Thermometer Example.

Rank

Appearance/Behaviour in App	List for ranking/prioritisation of the preset options.
Config	Add defaultValue= as necessary.
	Example: defaultValue=1,2,3 will result in a default order of 1,2 and then 3.
Option Examples	0 Option #1
	1 Option #2
	2 Option #3
	3 Option #4

- Tap and hold an option's handle (represented by three lines on the right of the option)
 and drag it up or down to change its position among the other options. Repeat with
 other options as appropriate.
 - > The top option is the highest ranked; the bottom is the lowest.

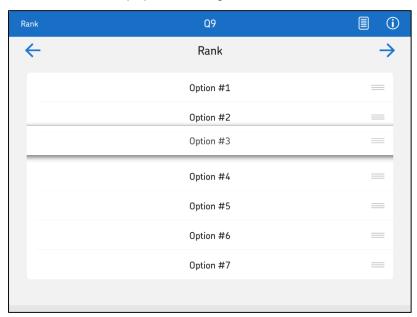


Figure 4 - 51. A Rank Question.

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J	ign	aıı	11 6

Appearance/Behaviour in App	Manual signature box and accompanying keyboard text entry box for user name. Both boxes are
	required.

- Use your finger or stylus to sign directly within the signature box.
- Enter your name in the text-entry box.



Figure 4 - 52. A Signature Question.

SingleChoice

Appearance/Behaviour in App	Radio buttons for selection of one of the preset options.
Config	Add defaultValue= as necessary.
	Example: defaultValue=1 will result in a default selection of 1.
Option Examples	0 Option #1
	1 Option #2
	2 Option #3
	3 Option #4

To complete the question in the app:

• Tap the option that best describes the appropriate response.

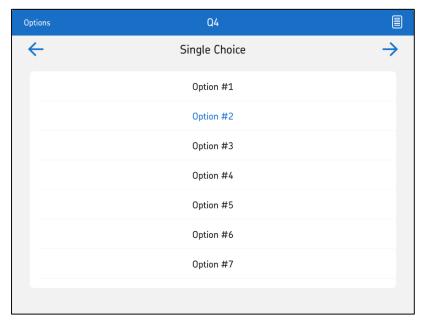


Figure 4 - 53. A SingleChoice Question.

Slider

Appearance/Behaviour in App	Slider with option labels displayed and option values hidden. The option values can be used to trigger Visibility rules or customized report items.
Config	Add defaultValue= as necessary. Example: defaultValue=1.0 will result in a default selection of 1.0.
Option Examples	0.0 Bad 0.5 Fair 1.0 Good

To complete the question in the app:

• Tap and hold the slider handle and drag left or right as appropriate to respond within the spectrum.



Figure 4 - 54. A Slider Question.

SpiderChoice

Appearance/Behaviour in App	Radio buttons for selection of one of the preset options. Results accessible in a SpiderChart available in both the app and the web interface reports. SpiderChart sections combine all applicable individual results (i.e. those in the section) as a single result for reporting. SpiderChart subsections are assigned to individual results so that they each have the same weight as a section of combined results.
Config	results id spider chart section spider chart subsection The results id is currently always "0" The spider chart section values are "0" for the first section, "1" for the second section, "2" for the third section, etc. Therefore, section configuration examples include 0 0 (questions in the first section), or 0 1 (questions in the second section), etc. Subsection configuration examples include 0 0 0 (first subsection in the first section) 0 0 1 (second subsection in the first section), etc. Add defaultValue= as necessary. Example: defaultValue=1 will result in a default selection of 1.
Option Examples	0 Option #1 1 Option #2 2 Option #3 3 Option #4

To complete the question in the app:

Tap the option that best describes the appropriate response.

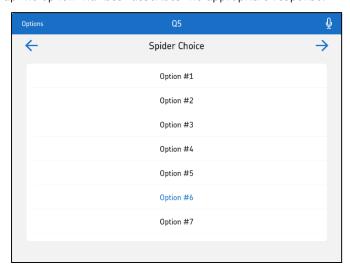


Figure 4 - 55. A SpiderChoice Question.

Table

- Tap the cell in which you intend to add a value.
- Select an option or enter text or a number for each cell as it relates to the row/column.
 - > Some cells are read-only and may contain data obtained elsewhere in the collection.



Figure 4 - 56. A Table Question.

Table2

- Tap the cell in which you intend to add a value.
- Select an option or enter text or a number for each cell as it relates to the row/column.
 - Some cells may contain default values. Tap any cell with a default value to select or enter a different value.
 - A shaded cell is not editable (as per rules implemented in the form template). Such cells are read-only and may contain data obtained elsewhere in the collection, through calculations, etc.
 - Within the table cells, you may encounter questions similar to many of the other question types described in this section. For more information on a particular cell's functionality, see instructions for the corresponding question type.

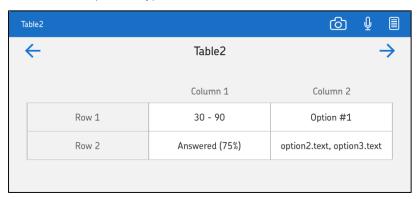


Figure 4 - 57. A Table2 Question.

TableFixed

- Tap the cell in which you intend to add a value.
- Select an option or enter text or a number for each cell as it relates to the row/column.
 - > Some cells are read-only and may contain data obtained elsewhere in the collection.



Figure 4 - 58. A TableFixed Question.

Text

Appearance/Behavior in App	Free-form text box.
Config	max characters
	Example: 50 will result in a text box accommodating 50 characters.
	Add defaultValue= as necessary.
	Example: defaultValue=N/A will result in default text "N/A."

To complete the question in the app:

• Tap the free-form text box, then enter text in response to a question or as otherwise instructed.

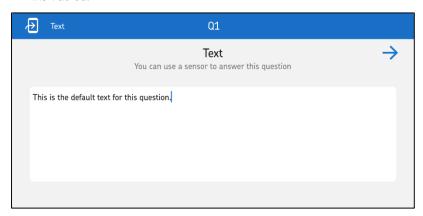


Figure 4 - 59. A Text Question.

To use a sensor to answer a text type question:



- Tap the transfer from sensor button.
- Select the appropriate wireless sensor or connect a sensor with a cable.

Sensor reading to import	Sensor type	Connectivity
Temperature	NODE Go Wireless Temperature Ti SensorTag (v2)	Bluetooth
Humidity	Ti SensorTag (v2)	Bluetooth
Atmospheric Pressure	Ti SensorTag (v2)	Bluetooth
Lux	Ti SensorTag (v2)	Bluetooth
Barcode	NODE	Bluetooth

Data Collection Results

View Data Collection Results in a SpiderChart

You can access the SpiderChart feature whenever you wish to see an overall average value for one group of responses compared to overall average values for other groups of responses.

> The availability of a SpiderChart is set up in the form template.

Each axis on a SpiderChart represents a single group of responses. The charted point at each axis represents the average value among that group's responses according to the defined scale.

Each form template can accommodate one SpiderChart only.

To access the SpiderChart screen:

- Tap the options menu within the desired collection on the Step screen.
- From the resulting menu, select **Performance**. The **<SpiderChart>** will appear.

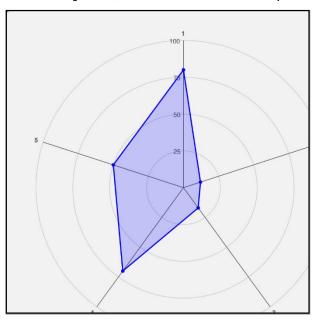


Figure 4 - 60. A SpiderChart.

Generate Report of Data Collection Results

You will likely generate most of your reports directly from the app, within each form. When you have completed a collection, you can immediately generate and send (email or upload to Box) a report of the collection's collected data.

To access the Generate Report window:

- Tap the options menu within the desired collection on the Step screen.
- From the resulting menu, select **Generate report**.



Figure 4 - 61.
Selecting **Generate Report**.

A Generate Report window will appear.

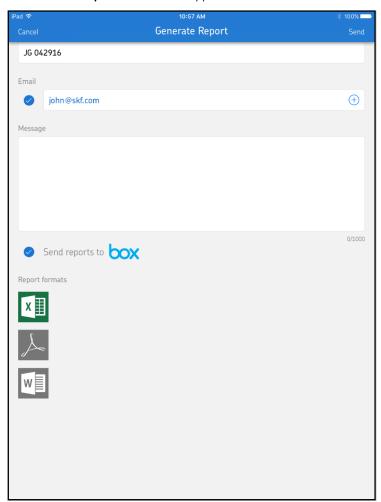


Figure 4 - 62. A **Generate Report** Window.

To generate and send a report:

- Tap the Report name text box and enter a name for the report.
 - Skip this step to keep the default name assigned to the report.
- Tap the Email text box and enter the email addresses of all intended recipients of the report as necessary.
 - The Email radio button is checked (selected) by default. If you do not wish to send the report via email, tap the radio button to deselect the option.
 - Your email address will appear in the **Email** text box by default.
 - ➤ If you wish to allow the app to access your device contacts for the purposes of selecting recipients, tap the add (+) icon on the right of this box.

If this is the first time that you are providing the app with access to your device contacts, the app will prompt you to confirm. Tap **Allow**.

If desired, begin typing a contact's name or email address to filter the list and more easily locate the appropriate contact.

Tap to select the contact that you wish to add to the recipient list.



Figure 4 - 63.
Select a Contact from Device Contacts List.

- Tap the Message text box and enter any text that you want to appear in the email body.
- If you wish to send the report to Box, tap the **Send reports to box** radio button to select (check).
- Tap the appropriate icon to select one of the **Report formats**: Excel, PDF, or Word.

- Tap **Send** to generate and send the report to the specified recipients.
 - If you are sending the report to Box, a Box login prompt appears. Enter your Box credentials and click **Authorise**.

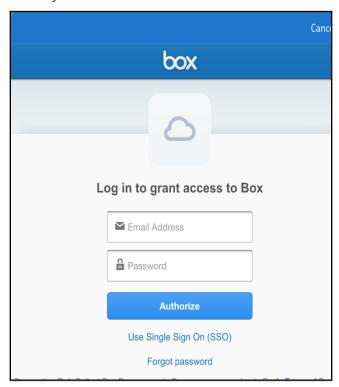


Figure 4 - 64. Box login.

Completing Standalone Collections

Chapter Overview

It is possible to create and complete standalone collections within the app. These collections are not associated with work orders and are organised independently on the Dashboard.

With **Collections** selected at the top right of the screen, the **Dashboard** contains a list of all collections that are available to you. From the **Dashboard**, you can add and start processing new collections, continue in-progress collections, and review completed collections. By default, the collections shown are those that currently have the status "ongoing". To see all collections you may access that currently have the status "completed", tap the **Completed** option at the top of the screen.

Add, Manage, and Process a Collection

To add a new collection:

- Tap + Add collection. A list of available forms will appear.
 - ➤ This list will contain your enabled <u>SKF standard forms</u> as well as forms associated with your work orders.
 - Enter text in the **Filter forms** text box to filter the list to display only forms containing the text entered.
- Tap a form to select it. DataCollect will create a new collection based on the selected form.
- Rename the collection, provide a description, and add a picture as desired (and as described in the <u>To add a collection</u> section earlier in this manual).
- Tap Save to set changes or Save and Proceed to set changes and open the collection for processing.



Figure 5 - 1. New Collection with Changes Set.

To edit a collection's image, name, or description:

- Tap the options button within the collection and select **Edit collection**. The collection will become editable.
- Edit the collection's image, name, or description (as described in the <u>To add a collection</u> section earlier in this manual).

To delete a collection:

- Tap and hold the collection. A Delete button will appear.
- Tap Delete. A confirmation prompt will appear.
- Tap **Yes, delete** to confirm and delete the collection.
 - > Alternatively, tap outside of the collection to cancel deletion.

To find a specific collection:

- Tap within the **Search DataCollect** box to bring up the search view and keyboard.
- Enter text and tap to select **Collections.** The list will filter to display only collections with names or descriptions containing the text entered.
- Tap to select **Ongoing** or **Completed** to display only collections with the selected status.

ΩR

- Swipe downward from the top of the screen to reveal the **Search** box.
- Tap within the box to invoke a keyboard.
- Enter text and tap to select **Ongoing** or **Completed**. The list filters to display only collections in the selected status with names or descriptions containing the text entered.

For each collection listed, the name, description (if included), and creation date are displayed in its information bar.

To select a collection for processing or review:

- Tap the appropriate collection. The Collection screen will display, where you can select
 the collection question categories for which you must collect data. If you will not be
 completing vibration measurements as described in the following section, you can follow
 the same process described in the <u>Work with Questions on the Collection Screen</u> section
 of this manual.
 - > For performance reasons, if a collection includes twenty or more media files, you cannot open that collection until fewer than twenty of those files remain in the download queue.

Add a Vibration Assessment Collection

Standalone collections may often be created in the app for the purpose of completing vibration measurements. If you will be completing vibration measurements, the process is as follows:

To prepare for a vibration measurement:

- Tap + Add a Collection. A list of available forms will appear.
- Tap the appropriate vibration assessment form to select it. DataCollect will create a new collection based on the selected form.



Figure 5 - 2.
Selecting Vibration Assessment Form.

- If prompted, select the group to which the new collection is to be assigned. DataCollect will add the new collection to the Dashboard.
- Rename the collection, provide a description, and add a picture as desired (and as described in the *To add a collection* section earlier in this manual).
- Tap **Save** to set changes or **Save and Proceed** to set changes and open the collection for processing.



Figure 5 - 3.

New Vibration Collection with Changes Set.

- Tap the collection to continue. The collection will load on the screen, and you can collect vibration data as described in the <u>Complete a Vibration Measurement Question</u> section of this manual.
 - > Depending on how the form was configured, you may need to complete some preliminary questions before the questions for which you must collect vibration data appear on the collection screen.

Appendix A

SKF @ptitude Analyst ROUTEs and DataCollect

SKF @ptitude Analyst ROUTEs and DataCollect Overview

Your company can also use DataCollect to complete @ptitude Analyst ROUTE data collection. First, an administrator must work within @ptitude Analyst to set up and assign a ROUTE to you, the DataCollect operator. The ROUTE then becomes available to you via the DataCollect app. Once you complete the ROUTE and upload collected data, the administrator may review collected ROUTE data in @ptitude Analyst.

Complete a ROUTE in DataCollect

To complete a ROUTE in DataCollect:

- Click on any hyperlink to jump to the section within this manual that describes the associated step in greater detail.
- Connect to the appropriate host environment (NOT the SKF Cloud host environment).
- Log into DataCollect.
- If necessary, <u>select the company and group</u> for which you intend to complete a ROUTE from the DataCollect Settings.
- Tap the <u>synch to/from cloud icon</u> to synchronise with the @ptitude Analyst host environment. If necessary, navigate to DataCollect's Dashboard. The ROUTE is downloaded to your iPad and appears—ready for data collection—on your DataCollect Dashboard.

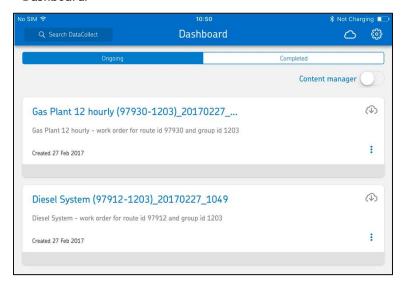


Figure A - 1.
ROUTEs Displayed on Dashboard .

• On the Dashboard, tap to select the ROUTE. Continue selecting the ROUTE on the following screens until you reach the screen displaying the ROUTE's set(s), machine(s), and POINTs.

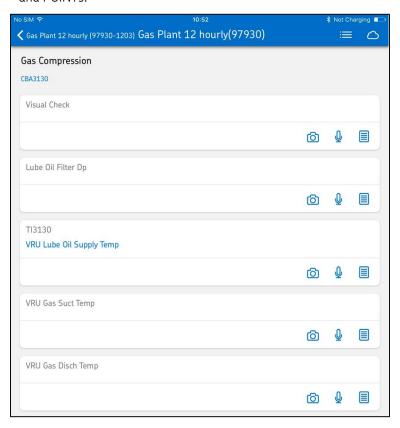


Figure A - 2. ROUTE Sets, Machines and POINTs.

- Step through each of the ROUTE POINTs in the order presented completing each
 POINT in the same manner described in the <u>Work with Questions on the Collection</u>
 Screen, Complete an EAN/QR Code Scan Data Collection Question Type, Complete a
 Vibration Measurement Question Type, and Complete All Other Data Collection Question
 Types sections of this user manual.
 - > For vibration measurement questions, you will see individual bars across the screen representing each measurement to be completed:

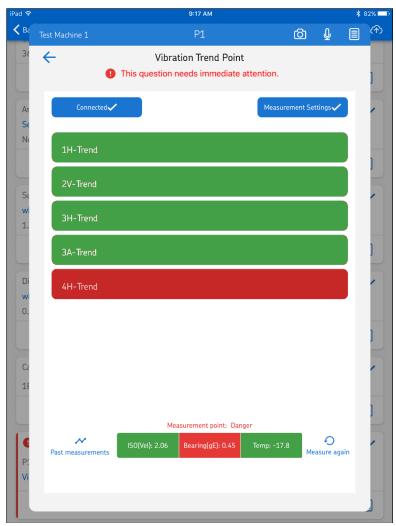


Figure A - 3.
ROUTE Vibration Measurement Question.

• When all ROUTE collection is complete, tap the <u>synch to/from cloud icon</u> to synchronise with the @ptitude Analyst host environment. The collected ROUTE data will be uploaded and appear - ready for review - in the @ptitude Analyst ROUTE table.

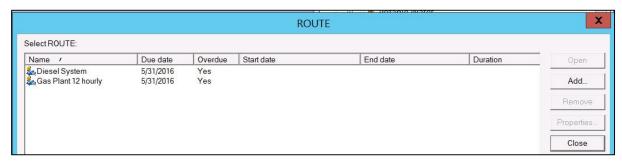


Figure A - 4.
ROUTE in @ptitude Analyst ROUTE table.

Appendix B About DataCollect App Version Upgrades

Upgrade notifications

SKF continues to release upgrades for the DataCollect app periodically. The app will notify you when a new version is available and prompt you to visit your app store to download and install the upgrade.

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